

ROCHESTER INSTITUTE OF TECHNOLOGY COMMENCEMENT

Remarks for Administrator Bolden

May 22, 2015

To President Destler; to the Board of Trustees; to the faculty and staff; to all the parents, grandparents, aunts, uncles, cousins, children, grandchildren, and friends who are with us ... it's an honor to share this very special day with all of you.

To the Class of 2015 – this is my favorite part – congratulations!

You did it!

NASA & ROCHESTER

The connections between NASA, Rochester and the Rochester Institute of Technology run deep.

We collaborate on cutting edge technologies like large format infrared detectors that can teach us more about dark matter and energy, 3D “super roadmaps of planets and moons” and “smart dust technology” that can help unlock the mysteries of the universe.

We also just have a whole lot in common. In fact, at NASA we like to think of ourselves as the “Rochester” of federal agencies. Why do I say that?

Well, for starters, Rochester has been ranked among America’s “most livable cities,” “one of the best cities in which to raise a family” and “among the cities with the highest quality of life”. What’s more, RIT is ranked as one of the best universities to for which to work in the United States.

At NASA, we’re very proud to have been ranked the #1 best place to work in the federal government for three years running.

Rochester gave birth to Kodak, Bausch & Lomb and Xerox. RIT has graduated numerous entrepreneurs and NASA spinoff technologies have birthed businesses throughout our country, including dozens here in New York state.

Meanwhile, RIT has been ranked among the best universities for aerospace.

At NASA, that's what we do.

The Sierra Club ranks RIT as one of America's greatest, *greenest* universities.

At NASA, that's also a big part of what we do -- from greener aviation to Earth Science that looks at our planet and how our climate is changing.

RIT has also, affectionately been ranked – and in my book this is a tremendous badge of honor – one of the nation’s “nerdiest” and “geekiest” campuses ... at NASA, we aspire to hold those distinctions as well (in fact, some might say we already do!)

The City of Rochester, of course, is often referred to as the “flour city” – both “f-l-o-u-r” and “f-l-o-w-e-r.” For you in the Class of 2015, when I think of all that you will accomplish, it gives new meaning to the term “flower power.” I’m here to tell you today that our planet desperately needs your Rochester “flower power.”

HELP WANTED

You all are graduating at a pivotal moment in human history. Our planet has a very big “help wanted” sign on it – *trust me on this, you can see it from space (not really)* – and we’re counting on your generation.

We're counting on you to cure the previously incurable ... to tackle big challenges like climate change ... to teach us to live as one people on this beautiful planet.

These are all great challenges – and if they sound a little intimidating that's because they *are*.

Now, others might prefer to opt out of addressing the big challenges of these times. *You* don't have that luxury. You see, you're about to join a very special group of people who are doing some truly remarkable things across the world. This club is called "RIT alumni."

Your fellow RIT alumni have founded companies and furthered the human spirit. They've written cookbooks and comic books.

They are scientists, psychiatrists, photographers, professors, philosophers, designers, entrepreneurs, equestrians, MMA fighters, elected officials, teachers, service members, glass artists, parents, and pillars of their communities.

Just think what *you'll* do!

THE SPACE GENERATION

For all the challenges we face, this is a remarkable time to be starting a career.

As a country, we've created 12.3 million new jobs and have experienced 62 consecutive months of job growth. Wages are rising. The deficit is falling. More Americans are buying homes. More businesses are hiring. More manufactures are ordering durable goods – fueled, I might add, by a sizable increase in aircraft orders.

We're less dependent on foreign oil than we've been in nearly three decades. Fewer of us have to go without health care or choose between filling prescriptions and filling the gas tank.

In a much broader sense, so much of the things that once were the purview of science fiction are now facts of life: Being able to have a video chat with a loved one half a world away on your phone, laptop or tablet; watching a movie that's been beamed down to earth via satellite; posting a high resolution photograph of your adorable little niece or nephew in real-time on your social media site of choice.

I call your generation the "space generation" because of the expansive way you look at our world, our universe and the possibilities they contain.

You live in a world where astronauts from many nations fly together in space every single day and where we're preparing to extend the human presence farther into the solar system. That also used to be the stuff of science fiction.

We're only a few months away from the *New Horizons* spacecraft's arrival in the Pluto system. When that happens the United States will have flown by or visited every single planet and dwarf planet in the solar system and we have a spacecraft that is already flying and operating outside our solar system – in interstellar space.

We're moving beyond the limits of our own imagination ... and it's your generation – each and every one of you in the Class of 2015 sitting here today – that is going to push us there; that is going to prove something President Kennedy said (and I quote) “*No problem of human destiny is beyond human beings.*” (End quote)

I want to invite you to close your eyes for a moment – imagine a future where human beings and robots work together to pioneer Mars and the Solar System. Graduates, you are this future!

You're part of the generation that will travel to an asteroid ... that will walk the face of Mars ... and, yes ... will return home safely.

Today, we're further along on our *Journey to Mars* than ever before in human history and it's your generation that's going to complete this journey. You're going to land human beings on Mars. Think about that for a moment. The feet in the first boots on the Red Planet could be here with us today.

Perhaps your own children and grandchildren will never know a time when human beings haven't been living on Mars.

In his State of the Union Address back in January, you might have heard President Obama declare that we're pushing out into the Solar System not just to visit but also to stay. This isn't science fiction – it's your generation's future ... and the task of building this future, this better society, is up to you.

BE LIKE ROCHESTER

As you do, I want to leave you today with just a few pieces of advice.

The first is “*be like Rochester.*” Be like Rochester. What I mean by this is, keep in mind that your success is not only about the work you do, but *how* you do it.

As I mentioned earlier, this city is recognized as a great place to live, and this university is recognized as a great place to work.

When you're a great place to work, the best and the brightest want to come and work for you and with you. What's more, they tend to want to keep working with you, too.

I can tell you that as NASA Administrator, my top priority is our people. It's a great source of pride that at the same time we're reaching new heights in space and aeronautics, we're also the #1 rated, best place to work in the federal government three years running. (*And hint, hint, we're hiring!*)

YOUR TEAM

This brings me to my second piece of advice ... The Seneca People who once inhabited this land have a saying: "*He [and I would add or "she"] who would do great things should not attempt them all alone. "*

I'll attest from my firsthand experience that this holds true whether you're leading Marines, flying combat missions or piloting a mission in space.

None of us would be here were it not for the shoulders on which we stood. So I want to advise you to not let a day pass that you don't approach someone who means a lot to you and thank them for just being themselves and for helping you be you.

With this in mind, graduates, I hope you'll join me in showing appreciation for your team – the parents and grandparents who cared for you and got you here; your family members and friends who have stood by you and traveled near and far to be with you today. Join me in a round of applause for them.

In my life, I've been blessed to go to space four times, and to travel to nearly every corner of our planet.

Nothing I've seen compares to the awe of looking into the eyes of my children and grandchildren. If you choose to start a family, love and care for them every single day as your loved ones have cared for you.

DON'T LISTEN TO THOSE WHO SAY YOU DON'T BELONG

My **third** piece of advice is a lesson my parents taught me and my wife and I try to teach our own kids and grandkids: Be bold, be fearless, dream big and, by all means, don't listen to anyone who tells you can't do something or you don't belong. Don't waste your time trying to explain yourself or your identity to anyone. Don't feel like you have to justify why you are where you are. This applies to the workplace or anywhere else.

In my younger days, my dream was to attend the U.S. Naval Academy and to serve my country – just as my father and my uncles had done in World War II, when African Americans had to fight for the right to serve in our Armed Forces.

Growing up in Columbia, SC during the days of segregation, it was an uphill battle. No one in my South Carolina Congressional delegation would provide an appointment nor nomination to the Academy as was required for admission. So I wrote President Johnson asking for help. I never got a response, but that possibly led to Congressman William Dawson of Illinois providing me the appointment I needed to be accepted. Rep. Dawson was himself a veteran of World War I and only the third African American elected to Congress in the 20th century.

After having to fight just for the opportunity to be admitted, my classmates at the Naval Academy did me the honor of electing me class president.

Today, after a 34-year career in the Marine Corps, I have the honor of serving as Administrator of NASA under the nation's first Black President.

Now when I say, “dream big” that doesn’t mean you’ll always know what the future holds. Growing up, I never conceived that some day I’d become a Marine Corps jet pilot, let alone pilot the space shuttle. When I finally made the decision to apply for the astronaut program, I was 34 years old and serving as a Marine Corps test pilot. Before that I had never even thought about being an astronaut – I figured it was just out of the question.

The man who convinced me that I could become an astronaut was a fellow South Carolinian named Dr. Ron McNair. He overcame obstacle-after-obstacle and went on to earn a PhD from MIT, to become a noted physicist, a highly accomplished jazz saxophonist and a fifth-degree black belt in karate.

Ron reached heights that most never would have thought possible and in 1984 he reached even higher, when he became the second African-American to fly into space.

CONCLUSION

As I close, I want to share with you a few words from a proud son of Rochester named Joseph C. Wilson. Sixty years ago, he bet the future of his father's company, Haloid, on a technology known as "xerography." Out of this bet came a revolutionary new machine that changed the way the world does business – and a multi-billion company: Xerox.

Speaking to new Xerox employers, Joseph said – and I quote –
"Change will be a way of life for you. You will not be doing things tomorrow the way you're doing them today ... we're seeking people who are willing accept risk. Who are willing to try new ideas. Who have new ideas of her own.

Who are not afraid to change what they are doing from one day to the next or one year to the next. Who welcome new challenges. Who welcome new people. Who welcome new positions.” End quote.

Class of 2015, Planet Earth is seeking just this sort of people as well. I for one believe you're up to the challenge. As you seek to answer Earth's big "Help Wanted" ad, change will indeed be a way of life for you.

While no one can tell you for sure where our world is headed in the years to come, I believe that your generation will take us to a better place. A place worthy of the planet I've been blessed to see from space -- where its serenity and lack of political borders belies the truth of what sometimes happens on the ground.

May you always be willing to accept risks, try new ideas, welcome new challenges, and reach for new heights.

Congratulations! Godspeed. God bless you. And God bless America.